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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,756	04/21/2004	William R. Kissel	71,033-014	5337

27305 7590 11/23/2005

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EXAMINER

NGUYEN, TAN QUANG

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/828,756	KISSEL, WILLIAM R.	
	Examiner	Art Unit	
	TAN Q. NGUYEN	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 3-19 AND 22-37 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 20, 21, 38 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAIL ACTION

Notice to Applicant(s)

1. This office action is response to the amendment filed on September 12, 2005. As per request, claims 4 and 22 have been amended. Thus claims 1-40 are still pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Croyle et al. (6,308,134).

4. As per claim 1 and 20, Croyle et al. disclose a method and system for establishing an acceleration of a vehicle which includes an acceleration device for measuring accelerations of the vehicle in a first direction (longitudinal) and a second direction (lateral), wherein the first and second directions being perpendicular (see at least column 1, line 50 to column 2, line 6). Croyle et al. also suggest that a third axis acceleration, for measuring acceleration due to gravity, can be used in order to improve the vehicle navigation which can operate completely independent of the vehicle sensors and increase flexibility in mounting (see column 1, line 66 to column 2, line 3 and

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column 5, line18-21). Croyle et al. further disclose a controller coupled to the acceleration device for establishing a magnitude of a horizontal component of the acceleration of the vehicle as a function of a gravity vector and the first and second acceleration values (see at least column 5, lines 14-29).

5. As per claims 2 and 22, Croyle et al. disclose that the component acceleration in the lateral direction and longitudinal direction, which is inherently defined a horizontal plane.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over the background of the invention on page 2, paragraph 0008 (the "admitted art") in view of Croyle et al. as applied to the claims above.

8. The "admitted art" disclose a system and method for controlling the braking of the towing vehicle which uses an accelerometer mounted directly to a printed circuit board within the cab of the towing vehicle (see paragraph 0008). The "admitted art" does not disclose the use of horizontal component of the acceleration as a function of a gravity vector, a first and a second acceleration values. However, such establishing a

magnitude of the horizontal of the acceleration of the towing vehicle is Taught in Croyle et al. as discussed above. It would have been obvious to an ordinary skill in the art to combine the teaching of Croyle et al. into the "admitted art" in order to improve the braking system of the towing vehicle by solving the restriction of the prescribed range of angular positions by using the magnitude of the acceleration in the horizontal plane.

9. Claims 3-19 and 22-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Although the prior art disclose several claimed limitations, none of the references teaches the system and method which includes the steps of applying a first offset value in the establishing the first acceleration value, and applying a second offset value in the establishing the second acceleration values, wherein the step of establishing the first and second offset values using a calibration routine which recited in claims 3-5 and 22-24. Further, the limitations recited in claims 6-19 and 25-39 render the claims unobvious over the prior arts of record.

Remarks

11. Claims 1, 2, 20, 21, 38 and 40 are rejected. Claims 3-19 and 22-37 are objected.

12. Applicant's arguments filed on September 11, 2005 have been fully considered but they are not deemed to be persuasive.

13. Applicant argued that the Croyle system does not disclose a gravity vector. Applicant's argument is not deemed to be persuasive because Croyle reference does suggest the horizontal acceleration component which includes the longitudinal acceleration and lateral acceleration (see at least column 1, lines 50-64). Croyle reference further suggest that another acceleration measurement sensor may be used

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for measuring the acceleration due to the earth's gravity, i.e. "gravity vector" as shown in at least column 1, line 65 to column 2, line 3 and column 5, lines 18-21. Thus, the examiner maintains that Croyle reference meets the limitations of the rejected claims as set forth earlier in this action.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tan Q. Nguyen, whose telephone number is (571) 272-6966. The examiner can normally be reached on Monday-Thursday from 5:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black, can be reached on (571) 272-6956.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to the Official Fax Center: (571) 273-8300.

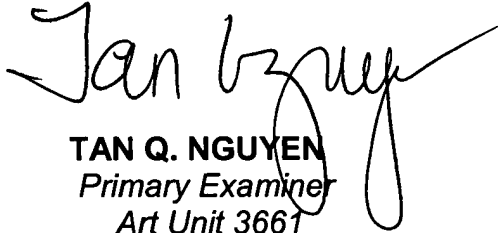
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/tqn

November 10, 2005


TAN Q. NGUYEN
Primary Examiner
Art Unit 3661